

Serial No.: 09/417,051  
Art Unit: 2611

Attorney's Docket No.: BS99-047  
Page 2

This listing of claims replaces all prior versions, and listings, of claims in this application.

**Listing of Claims:**

1-5. (Withdrawn)

6. (Currently Amended) A data architecture for storing EIT data in a memory of a set top box, comprising:

    a segment data structure into which a segment of EIT data containing information related to one or more events is stored and an event instance table pointer corresponding to the segment data structure are stored;

    an event instance table pointed to by said event instance table pointer corresponding to said segment data structure, comprising:

        one or more event instance data structure each corresponding to one of said one or more events and each containing an event data structure pointer; and;

        one or more event data structures containing common information for ~~like~~ events having same event-related information, wherein each particular event data structure is pointed to by said event data structure pointer stored in those of said one or more event instance data structures that correspond to said ~~like~~ events having same event-related information.

7. (Currently Amended) The data architecture recited in claim 6, further comprising an event-related data table, comprising:

    event-related data associated with said events having same event-related information ~~like~~ event; and

Serial No.: 09/417,051  
Art Unit: 2611

Attorney's Docket No.: BS99-047  
Page 3

a pointer to said event detailed structure associated with said ~~like~~ events having same event-related information.

8. (Original) The data architecture recited in claim 6, wherein said segment data structure has a length of 10 bytes or less.

9. (Original) The data architecture recited in claim 6, wherein, said event instance data structure has a length of 12 bytes or less.

10. (Original) The data architecture recited in claim 6, wherein said event data structure has a fixed portion having a length of 12 bytes or less and a variable portion having an average length of approximately 70 bytes.

11. (Original) A method for storing EIT data in a set top box, comprising the steps of:

- (a) receiving a segment of EIT data;
- (b) storing said segment;
- (c) creating an event instance data structure associated with a particular event in said segment;
- (d) extracting event-related data pertaining to said particular event;
- (e) comparing the extracted event-related data to event-related data previously stored in an event-related data table;
- (f) obtaining an event data structure pointer to detailed data associated with said particular event from said event-related data table if a match occurs in step (e);

Serial No.: 09/417,051  
Art Unit: 2611

Attorney's Docket No.: BS99-047  
Page 4

- (g) storing said event data structure pointer in said event instance data structure; and
- (h) storing said event instance data structure in an event instance table.

12. (Original) The method recited in claim 11, wherein step (b) comprises the steps of:

- (i) creating a segment data table;
- (ii) storing said segment in said segment data table; and
- (iii) storing an event instance data pointer pointing to said event instance data table in

association with said segment.

13. (Original) The method of claim 11, further comprising the steps of:

- (i) creating an event data structure in which detailed data associated with said particular event is stored when there is no match in comparing step (e);
- (j) creating an event data pointer to said event data structure created in step (i); and
- (k) storing said extracted event-related data and said event data pointer created in step (j) in said even-related data table.

14. (Original) The method recited in claim 13, further comprising the step of hashing said event-related data prior to comparing step (e).

15. (Currently Amended) The method recited in claim 11, further comprising the steps of:

- (i) determining if said extracted event-related data corresponding to the first event in the EIT data; and

Serial No.: 09/417,051  
Art Unit: 2611

Attorney's Docket No.: BS99-047  
Page 5

(j) creating an event data structure in which detailed data associated with said particular event is stored if step (i) indicates the event-related data corresponds to the first event;

(k) creating an event data pointer to said event data structure created in step (j); and

(l) storing said extracted event-related data and said event data pointer created in step (k) in said event-related data table.

16. (Currently Amended) The method recited in claim 11, further comprising the steps of:

- (i) determining if all events in said segment have been processed; and
- (j) repeating steps (c)-(h) until all events in said segment have been processed.

17. (Currently Amended) The method recited in claim 11, further comprising the steps of:

- (i) determining if all segments in said EIT data have been processed; and
- (j) repeating steps (a)-(h) until all segments in said EIT data have been processed.

18-21. (Withdrawn)

22. (Currently Amended) A set top box comprising:

a receiver to receiver EIT data and format said EIT data into formatted EIT data;

a processor to process said formatted EIT data; and

a memory having a data architecture in which the processed EIT data is stored so as to significantly reduce the inherent redundancy of the EIT data.

Serial No.: 09/417,051  
Art Unit: 2611

Attorney's Docket No.: BS99-047  
Page 6

23. (Currently Amended) The set top box of claim 22 wherein said processor determines which data is common to like events in said EIT data and stores that common data in a single data structure accessible by each of said like events.

24. (Original) The set top box of claim 22, wherein said EIT data is reordered by time prior to being sent to the set top box.

25. (Original) The set top box of claim 22, wherein said processor reorders the formatted EIT data by time.